

Amendments to the Claims

This listing of the claims will replace all prior versions, and listings, of claims in this application.

Listing of Claims

1. (Previously Presented) An isolated nucleic acid molecule comprising the nucleotide sequence of SEQ ID NO:1, or a complement thereof.

2-3. (Canceled)

4. (Previously Presented) An isolated nucleic acid molecule which encodes a polypeptide comprising the amino acid sequence of SEQ ID NO:2.

5. (Previously Presented) An isolated nucleic acid molecule which encodes a naturally occurring allelic variant of a *Corynebacterium glutamicum* polypeptide comprising the amino acid sequence of SEQ ID NO:2, wherein the nucleic acid molecule hybridizes to the complement of a nucleic acid molecule consisting of SEQ ID NO:1, in 6X SSC at 45°C, followed by one or more washes in 0.2X SSC, 0.1% SDS at 50-65°C, and wherein said nucleic acid molecule encodes a polypeptide having 6-phosphogluconolactonase activity.

6. (Previously Presented) An isolated nucleic acid molecule comprising a nucleotide sequence which has at least 90% identity with the nucleotide sequence of SEQ ID NO:1, wherein said nucleic acid molecule encodes a polypeptide having 6-phosphogluconolactonase activity, or the complement thereof.

7-8 (Canceled)

9. (Currently Amended) An isolated nucleic acid molecule comprising the nucleic acid molecule of any one of claims 1 and 4-7 ~~6~~ and a nucleotide sequence encoding a heterologous polypeptide.

USSN: 09/602,740

- 5 -

Group Art Unir: 1652

10. (Previously Presented) A vector comprising the nucleic acid molecule of claim 1.
11. (Previously Presented) The vector of claim 10, which is an expression vector.
12. (Previously Presented) A host cell transfected with the expression vector of claim 11.
13. (Previously Presented) The host cell of claim 12, wherein said cell is a microorganism.
14. (Previously Presented) The host cell of claim 13, wherein said cell belongs to the genus *Corynebacterium* or *Brevibacterium*.
15. (Canceled)
16. (Canceled)
17. (Previously Presented) A method of producing a polypeptide comprising culturing the host cell of claim 12 in an appropriate culture medium to, thereby, produce the polypeptide.
- 18-24. (Canceled)
25. (Previously Presented) A method for producing a fine chemical, comprising culturing a cell containing a vector of claim 11 such that the fine chemical is produced.
26. (Previously Presented) The method of claim 25, wherein said method further comprises the step of recovering the fine chemical from said culture.

USSN: 09/602,740

- 6 -

Group Art Unit: 1652

27. (Previously Presented) The method of claim 25, wherein said method further comprises the step of transfecting said cell with the vector of claim 11 to result in a cell containing said vector.

28. (Previously Presented) The method of claim 25, wherein said cell belongs to the genus *Corynebacterium* or *Brevibacterium*.

29. (Currently Amended) The method of claim 25, wherein said cell is selected from the group consisting of: *Corynebacterium glutamicum*, *Corynebacterium herculis*, *Corynebacterium lilium*, *Corynebacterium acetoacidophilum*, *Corynebacterium acetoglutamicum*, *Corynebacterium acetophilum*, *Corynebacterium ammoniagenes*, *Corynebacterium fujiokense*, *Corynebacterium nitrilophilus*, *Brevibacterium ammoniagenes*, *Brevibacterium flavum*, ~~*Brevibacterium heali*~~, ~~*Brevibacterium ketoglutamicum*~~, *Brevibacterium ketosoreductum*, *Brevibacterium linens*, *Brevibacterium parafinolicum*, and those strains set forth in Table 3.

30. (Canceled)

31. (Previously Presented) The method of claim 25, wherein said fine chemical is selected from the group consisting of: organic acids, proteinogenic and nonproteinogenic amino acids, purine and pyrimidine bases, nucleosides, nucleotides, lipids, saturated and unsaturated fatty acids, diols, carbohydrates, aromatic compounds, vitamins, cofactors, polyketides, and enzymes.

32. (Previously Presented) The method of claim 25, wherein said fine chemical is an amino acid.

33. (Previously Presented) The method of claim 32, wherein said amino acid is drawn from the group consisting of: lysine, glutamate, glutamine, alanine, aspartate, glycine, serine, threonine, methionine, cysteine, valine, leucine, isoleucine, arginine, proline, histidine, tyrosine, phenylalanine, and tryptophan.

34-38. (Canceled)